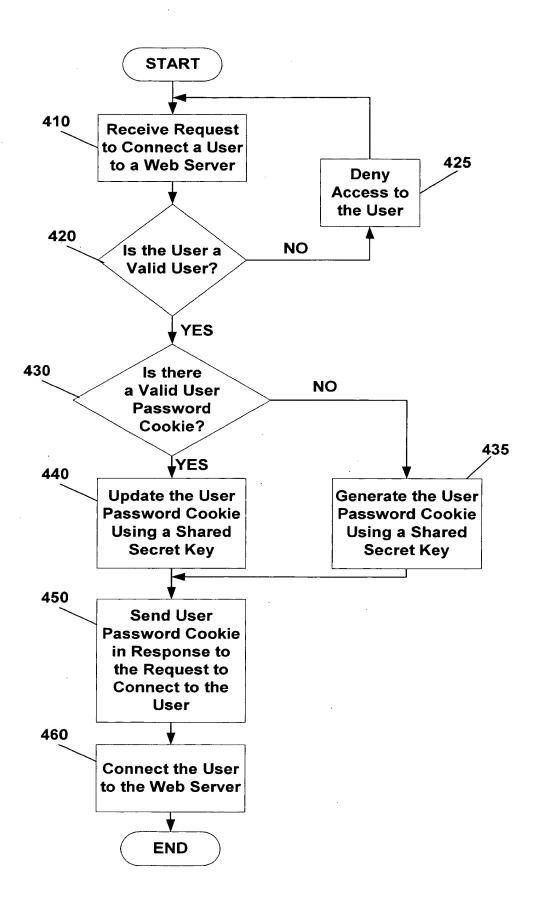


FIG. 4



User Browser

Internet

- 1. A user sends a request to connect to a protected page at web site A
- Assigned web server at web site A reads user credential cookie
 - 3. Web server at web site A prompts for user identification (ID) and password
 - User sends ID and Password to web server at web site A
- Web server at web site A sends the password cookie in response to the request to connect
- 7. Establish authenticated connection between the user and the web server at web site A
- Send request to connect to web site B in the authentication ring

Protected Web Page at Web Site A 5. Web server at web site A receives and validates the user ID and password and, if valid, generates a password cookie using a shared secret key

Protected Web

Web site B web server receives the request and reads the user's password cookie

at Web Site B

- 10. Web site B web server decrypts the password cookie using the shared secret key, validates the user, updates the password cookie and re-encrypts the password cookie using the shared secret key
 - 11. Web site B web server sends updated password cookie in response to the request to connect to web site B
- 12. Establish authenticated connection between user and Web site B web server

password cookie using the shared secret key request to connect to the SOP web server password cookie using the shared secret 10. SOP web server decrypts the user's 9. SOP web server receives the request SOP web server sends the updated and reads the user's password cookie password cookie and re-encrypts the key, validates the user, updates the password cookie in response to the **Extranet SOP Web** Extranet 5. SERP web server receives and validates the user ID Hard Mark 1970, 1977, 1979, 1971, 1974, 1974, 1974, 1974, 1977, 1974, 19 User sends ID and password to SERP web server Intranet SERP 7. Establish an authenticated connection between Web Site and password and, if valid, generates a password 6. SERP web server sends password cookie in between the user and the SOP web server 12. Establish an authenticated connection 8. Send a request to connect to the SOP response to the user connection request web server in the authentication ring a protected page at SERP web site the user and the SERP web server cookie using a shared secret key 1. A user requests to connect to Assigned SERP web server 3. SERP web server prompts reads user credential cookie Intranet for user ID and password 9 User Browser